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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/708,553	03/11/2004	Yi-Jen HU	OTMP0072USA	2552	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506			EXAMINER		
			YENKE, BRIAN P		
MERRIFIELD, VA 22116			ART UNIT	PAPER NUMBER	
			2622		
·		•	NOTIFICATION DATE	DELIVERY MODE	
		08/16/2007	ELECTRONIC		

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com
Patent.admin.uspto.Rcv@naipo.com
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		Application	No.	Applicant(s)				
Office Action Summary		10/708,553		HU ET AL.				
		Examiner		Art Unit				
		BRIAN P. Y	ENKE	2622				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
<ul> <li>A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.</li> <li>Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>								
Status								
1)	Responsive to communication(s) filed on							
, —	•	· · · · · · · · · · · · · · · · · · ·						
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
سب ر	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4\\∑1	Claim(s) 1-22 is/are pending in the application.	l.						
	4) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.							
	6)⊠ Claim(s) <u>1-22</u> is/are rejected.							
	Claim(s) <u>F = E</u> is/are objected to.							
8)	Claim(s) are subject to restriction and/o	or election re	quirement.					
Applicat	ion Papers							
	The specification is objected to by the Examine	<u>ə</u> r						
10)⊠ The drawing(s) filed on <u>11 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority (	under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
2) Notice 3) Information	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date 9/20/05.		4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate				

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## **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 currently states a main board module which transmits... to the CPU unit of the main board module. The examiner presumes from the drawings/disclosure that the claim should read the to the CPU unit of the optical engine module. The examiner has rejected the claim below using this presumption.

#### Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim\*\*\* rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Morishita, US 6,793,347.

In considering claim 1,

AAPA (Fig 1) discloses a main board module 11 along with an optical engine module 12 (Fig 1). However, AAPA does not disclose the claimed CPU in the optical engine module.

It is noted that AAPA discloses a CPU 111 which sends control signals to optical engine module 12's light valve 123.

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The concept of including a controller (CPU) in one or more modules is conventional practice in the art, which allows the designer/system various options when designing the modules. The examiner evidences the concept of multitude controllers as shown by Morishita Fig 7, wherein front end circuit module 7 along with DMD drive circuit module 8 both include microcomputers 76, 81 respectively.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify AAPA by adding an additional controller (CPU) which would provide the conventional capability of modules being controlled with their own controller as evidenced by Morishita.

In considering claim 2,

As stated above with respect to the 112 rejection, the examiner presumes the main module transmits control signals to the optical engine module. This limitation would have been met with the combination of AAPA and Morishita as stated above.

In considering claims 3-6,

The combination above does not explicitly recite the type of connecting ports (i.e. analog (VGA), digital (DVI)), however these are conventional protocols used with the field of endeavor. Thus the use of analog (VGA) and/or digital (DVI) are known standards and they may be selected/desired based upon the intended design/use of the system. The examiner notes that cited references US 20030001981 discloses the use of digital (DVI) and US 7,116,379 discloses the use of analog (VGA) signals.

In considering claims 7-8,

The combination above discloses that based upon the signals received and the display output determine the adjustement/mode of operation in order to display a viewable picture.

In considering claim 9,

Morishita discloses the use of a DMD 9 (light valve) prior to the projection display (Fig 7). In considering claim 10,

. Morishita discloses the reception of an image signals from format converter 83 (Fig 7).

In considering claim 11,

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AAPA discloses a processing unit 112 to provide the optical engine the image signals for display. Morishita also discloses a scaler 74 along with a formatter converter 83 (Fig 7).

In considering claim 12,

AAPA discloses the claimed illumination unit, and projection lens. For the light valve limitation refer to claim 9 above.

In considering claim 13,

Refer to claim 11 above.

In considering claim 14,

Refer to claim 1 above.

In considering claims 15-18,

Refer to claims 3-6 above.

In considering claims 19-20,

Refer to claims 7-8 above.

In considering claim 21,

Refer to claim 10 above.

In considering claim 22,

Refer to claim 12 above.

## Conclusion

- 3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure—see newly cited references on attached form PTO-892.
- 4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (571)272-7359. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, David L. Ometz, can be reached at (571)272-7593.

Any response to this action should be mailed to:

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Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(571)-273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is

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An automated message system is available 7 days a week, 24 hours a day providing informational responses to frequently asked questions and the ability to order certain documents. Customer service representatives are available to answer questions, send materials or connect customers with other offices of the USPTO from 8:30 a.m. - 8:00p.m. EST/EDT, Monday-Friday excluding federal holidays.

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B.P.Y 07 Aug 07

BRIAN P. YENKE PRIMARY EXAMINER